

**What Is Claimed Is:**

1 An apparatus for receiving a television or a  
navigator display monitor for vehicles, in which a  
liquid crystal monitor is ejected/received from/into a  
5 case 2 in slide manner while is tilted in horizontal  
direction when the monitor is ejected from the case,  
the apparatus comprises:

a chassis panel 5 having synthetic resin sliders  
positioned at both sides thereof, the sliders 13 being  
10 slid along guide rails 4 mounted to inner sides of the  
case 2;

a tilting body 1 being connected to a monitor  
cover frame 3 to which a monitor cover 14 is mounted  
and being tilted in horizontal direction along a pair  
15 of teathed slots 25 formed at the chassis panel 5;

a driving motor 6, 16 provided at the tilting body  
1 and a gear train 7, 8, 19, 21, 22 for reducing speed  
of the driving motor 6, 16;

a pivoting plate 23 having a pivoting gear 24  
20 rotated by the driving motor 16 and being rotatably  
mounted at the tilting body 1 to be pivoted in the  
rotation direction of the pivoting gear 24; and

a pair of rotating shafts 31 being rotatably  
installed to the tilting body 1 and having a upper  
25 gear 26 engaged with a teathed portion 25a of the

teethed slots 25 and a lower gear 30a, 30b engaged  
with intermediate gears 27a, 27b installed to both  
sides of the tilting body 1, while engaged with the  
pivoting gear 24 when the pivoting plate 23 is pivoted,  
5 respectively.

2. The apparatus as in claim 1, the gear train 8  
includes a worm gear 7 mounted to a shaft of the  
driving motor 6, a helical gear 21 engaged with the  
10 worm gear, and a small gear 22 formed integrally with  
the helical gear 21 and engaged with the pivoting gear  
24.

3. The apparatus as in claim 1, the pivoting plate  
15 23 has a bent piece 29 being guided along an arc guide  
slot 28 formed at the tilting body 1.

4. The apparatus as in claim 1, the teethed  
portion 25a is only formed at an inside edge of the  
20 teeth slot 25.

5. The apparatus as in claim 1, the guide rails 4  
have a protector 15 made from synthetic resin at front  
end thereof, respectively.

6. An apparatus for receiving a television or a navigator display monitor for vehicles, in which a liquid crystal monitor is ejected/received from/into a case 2 in slide manner while is tilted in horizontal direction when the monitor is ejected from the case 2, the apparatus comprises:

a chassis panel 5 being connected to a monitor cover frame 3 to which a monitor cover is mounted and having a pair of L shaped teethed slots 17 having teethed edge 17a and a plurality of support and guide slots 54, 51, 20a, 50b, the monitor cover having straight portions connected to guide rails of the case in straight line when the monitor cover frame is disposed horizontally;

a tilting body 1 having a plurality of pins 53, 49a, 49b, 52 supported at several points and guided by the support and guide slots 13, 19, 24a, 24b and being pivoted about imaginary centers C, C' when the tilting body is tilting by driving of a driving motor provided inside thereof; and

a pair of clutch mechanisms 41 including a lower clutch shaft 43b driven by the driving motor 16, an upper clutch shafts 43b having upper gears 42a, 42b engaged with the teethed edges 25a and frictionally coupled to the lower clutch shaft 43a, and a spring 48

for pressing the lower clutch shaft 43a against the upper clutch shaft 43b, respectively;

wherein the upper gears 42a, 42b of clutch mechanisms rotate in a same direction.

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7. The apparatus as in claim 6, the lower clutch shaft 43a has serration grooves 47a formed at an upper surface thereof, the upper clutch shaft 43b has serration grooves 47b frictionally coupled to the  
10 serration grooves 47a of the lower clutch shaft by the spring, at lower surface thereof.

8. The apparatus as in claim 6, the support and guide slot 54 is positioned at central portion of the chassis  
15 panel 5 and is formed V-shape of which each side has a certain curvature.

9. The apparatus as in claim 6, the teethed portions 25a are only formed at an outside edge of the  
20 teeth slots 25.